

# Source Testing

## How To Plan And Execute A Successful Source Test

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# Keys to a Successful Testing Event

**Plan**

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# Keys to a Successful Testing Event

Decision to Test

Hire An Available Test Company

Prepare Test Plan

Submit Plan For Approval

The Approval Process

Notification

## Test

Compile Data

Analyze Audit Samples

Prepare Report

Submit Report

Submit Audit Sample Results

Report Review/Approval

# *Keys to a Successful Testing Event*

## The Decision To Test

**What is the test objective?**

Compliance Demonstration?

Emissions Factor Verification or Development?

Establishing Parametric Monitoring Ranges?

Engineering Study?

# *Keys to a Successful Testing Event*

## The Decision To Test

**What regulatory time frames must I meet?**

Compliance  
Notifications  
Test Plan  
Audit Samples  
Test Report  
Other Reports

# *Keys to a Successful Testing Event*

## **The Decision To Test**

**What are other testing considerations?**

Access To Sampling Site?

Availability/Installation of Properly Located  
Sample Ports?

Appropriate Utilities?

Audit Samples?

Safety Plan?

# *Keys to a Successful Testing Event*

## **The Decision To Test**

**What are other testing considerations?**

Do All Appropriate Parties and Persons Know And  
Understand Their Role And Responsibilities?  
Production Appropriately Scheduled?  
Adequate Fuel Supply?  
Contingency Plan?  
Special Circumstances?

# *Keys to a Successful Testing Event*

## The Decision To Test

Can I get there from here?



# ***Keys to a Successful Testing Event***

## **Site Specific Test Plan Submittal Requirements**

**South Carolina** - At least 45 days prior, at least 60 days prior for tests involving Standard 8 pollutants.

**NSPS (Part 60)** – Silent, Defaults to SC.

**NESHAP (Part 61)** - Silent, Defaults to SC.

**MACT (Part 63)** - At least 60 days prior.

# *Keys to a Successful Testing Event*

## Site Specific Test Plan Content Expectations

1. Facility Information
2. Test Objectives
3. Process Descriptions
4. Safety Considerations

# *Keys to a Successful Testing Event*

## **Site Specific Test Plan Content Expectations**

5. Sampling and Analytical Procedures
6. Sampling Locations and Documentation
7. Internal Quality Assurance/Quality Control (QA/QC) Measures. For each proposed test method when applicable
8. Test Report Content

# *Keys to a Successful Testing Event*

## Revisions to a Previously Approved Test Plan?

**Any Change** other than the following require the submittal of a revised test plan in accordance with normal regulatory time frames (45-60 days):

- Facility name, address, and telephone number, and name of facility contact.
- Facility permit number and source identification number.

If only the facility information noted above needs to be updated, amendments to the previously approved test plan must be submitted at least 2 weeks prior to the proposed test date.

# *Keys to a Successful Testing Event*

## **Revisions to a Previously Approved Test Plan!?**

Upon notification of the conduct of a source test utilizing a previously approved test plan, the Department may re-review the previously approved test plan. If the plan does not meet our current minimum standards, the plan must be updated and reapproved **PRIOR** to the test being conducted.

# *Keys to a Successful Testing Event*

Submittal of a test plan or revision

**DOES NOT**

Constitute notification

# *Keys to a Successful Testing Event*

## **What Is Proper Notification?**

Facility information

Specific approved test plan by date and revision number

Dates of proposed testing

Special information relating to this test

# *Keys to a Successful Testing Event*

## **Proper Notification?**

South Carolina - At least two weeks prior

NSPS (Part 60) - At least 30 days prior<sup>1</sup>

NESHAP (Part 61) - At least 30 days before

MACT (Part 63) - At least 60 days before<sup>1,2</sup>

1- Except as specified in each subpart

2- 30 days for Method 9 not done during other testing



# *Keys to a Successful Testing Event*

## **Audit Sample Request?**

MACT (Part 63) Sources

At least 30 days before the test you

**MUST REQUEST**

performance audit samples

# ***Keys to a Successful Testing Event***

## **What Is Required in A Complete Audit Sample Request?**

**Test Method(s)** For Which Audit Samples Are Requested

**Test Date**

**Analysis Date**

**Contact Information** For The Source, Sample Collection Firm, and Sample Analysis Firm Including:

Company Name, Contact Person, Physical (Shipping) Address, Mailing Address, and Phone Number.

# *Keys to a Successful Testing Event*

**What are other testing considerations?**

Safety?

Site Preparation?

Clear expectations of all involved parties?

Contingency Plan?

# *Keys to a Successful Testing Event*

## **Test Day**

Review With all Present; Site Safety, Communications, Chain of Command, Responsibilities and Expectations of All Involved Parties, Test Plan, Timing, Contingency Plan, Other Concerns.

# *Keys to a Successful Testing Event*

## **The Test Report**

Test report must be submitted to the Department no later than 30 days after the test is completed unless a different time frame is requested and approved in the test plan.

# *Keys to a Successful Testing Event*

## **Test Report Content Expectations?**

- a. Summary of the results.
- b. Emission calculations and emission rates in units of the applicable standard, permit limit, etc.
- c. Allowable emission rates in units of the applicable standard, permit limit, etc.
- d. Source compliance status.
- e. Process operating rates.

# ***Keys to a Successful Testing Event***

## **Test Report Content Expectations?**

- f. Methods including actual calculations, equations, and other related information that were used to demonstrate and verify the operating rate during the source test.
- g. Chain of custody records.
- h. Certification of all reference standards used.
- i. Signature of a responsible facility representative who can verify process operating rates and parameters.
- j. Legible copies of all raw laboratory data.

# ***Keys to a Successful Testing Event***

## **Test Report Content Expectations?**

- k. Legible copies of all raw field data.
- l. Legible copies of applicable stack gas or opacity monitoring system readings.
- m. Legible copies of all applicable process and air pollution control operating parameter readings.
- n. Results of all calibrations and QA/QC measures and checks.
- o. Results of performance audits.



# *Keys to a Successful Testing Event*

## **Test Report Content Expectations?**

- p. Description of any deviations from the proposed process operations.
- q. Description of any deviations from approved sampling methods/procedures.
- r. Description of any deviations from approved analytical procedures.
- s. Description of any problems encountered during sampling and analysis, and explanation of how each was resolved.

# *Keys to a Successful Testing Event*

**Can I get there from here?**



# Questions?

